Yukon
Health and Social Services

Yukon Influenza Surveillance Report
Influenza Season: 2009-2010
Summary Report
FluWatch Weeks 13-16 (March 28th - April 24th 2010)

***All data are provisional and subject to change as information is received.*

Prepared by: Yukon Communicable Disease Control
Report Written: May 7, 2010
Disseminated: May 11, 2010

Report Highlights

This surveillance report, produced by YCDC, summarizes influenza activity in the Yukon for the 2009-2010 season, during weeks 13-16 (March 28th - April 24th, 2010). Please note that FluWatch reports are produced one week behind the current date.

2009-2010 FluWatch Weeks Calendar: *http://www.phac-aspc.gc.ca/fluwatch/09-10/09-10cal-eng.php*

During weeks 13-16, surveillance indicators continue to demonstrate low to no levels of influenza activity.

Pandemic H1N1 (pH1N1) Severe Outcomes

Hospitalizations
There have been no hospitalizations since week 46 (Nov 15 - Nov 21, 2009).
Since October 20th, there have been 15 pH1N1 Yukon residents admitted to hospital. Among hospitalized cases 12 of the 15 had at least one risk factor for influenza complications. 3 out of 15 hospitalized cases have been admitted to ICU.

Deaths
There have been no deaths reported since week 46 (Nov 15 - Nov 21).
Yukon has had three deaths where pH1N1 was detected; pH1N1 played a direct role in the death in two of the three individuals. The first death occurred during week 44, in a female child with underlying health conditions. The second death occurred during week 46 in an adult female, underlying health conditions were not present. A third death was announced December 9th, 2009. The death occurred in an infant who died early November, however, pH1N1 infection is thought to be coincidental and not a contributing factor in the death. A complete coroner's investigation is pending. Link to Yukon Health and Social Services Release: http://www.hss.gov.yk.ca/news/id

FluWatch Reporting

Based on FluWatch activity level definitions, Yukon has reported the following activity levels:

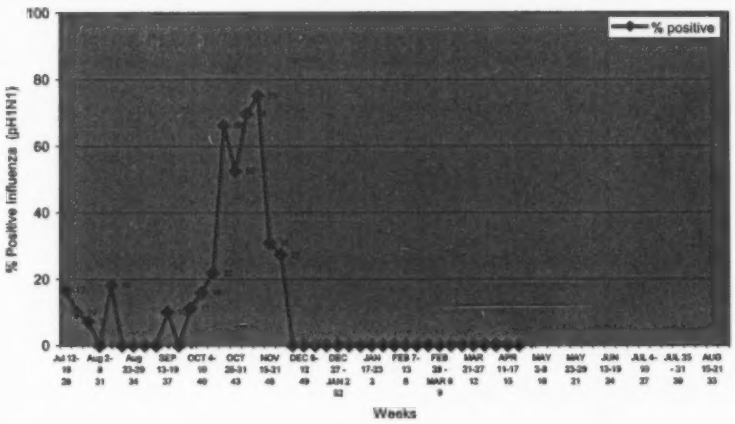
FluWatch activity level definition http://www.phac-aspc.gc.ca/fluwatch/09-10/def09-10-eng.php

Weeks13-16	No activity: no laboratory-confirmed influenza detections during the past four weeks, however, sporadically occurring ILI may be reported

Laboratory Reports

Since week 47 none of the submitted respiratory specimens have tested positive for influenza. Percentage of respiratory specimens testing positive for influenza A was highest during week 45, when percent positivity was 75%.

Percentage of Respiratory Specimens (Submitted for testing in Yukon) Diagnosed Positive for Influenza pH1N1 by week



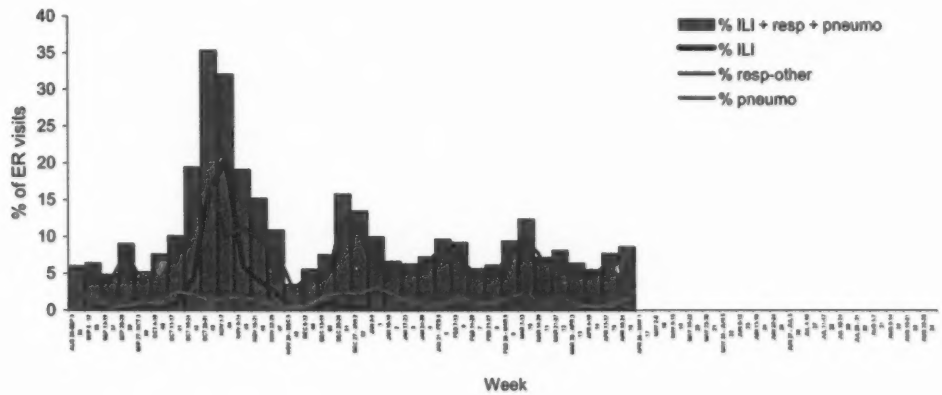
Communities with Laboratory Confirmed pH1N1

Cumulative laboratory information indicates that since April, 2009 Whitehorse and 9 out of 13 surrounding communities have had confirmed pH1N1 case reports.

Whitehorse General Hospital Emergency Visits

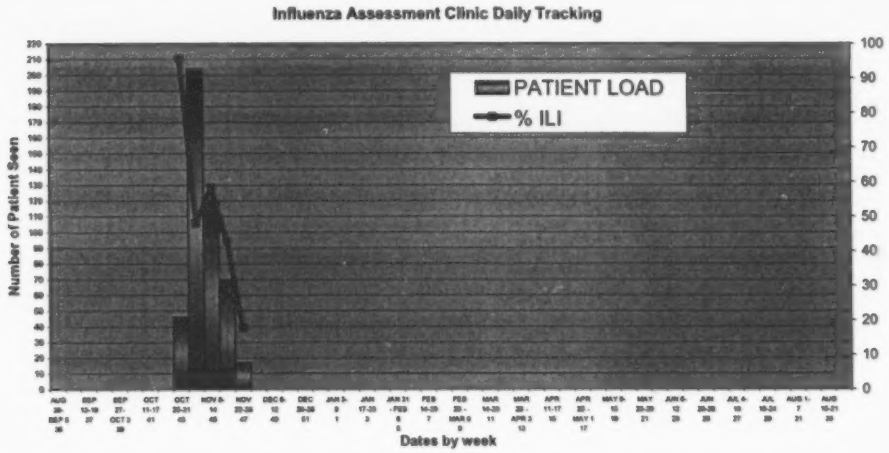
During weeks 13-16 the proportion of presentations to the WGH emergency department for respiratory symptoms identified as ILI has remained low.

Percent of WGH ER visits with influenza-like illness (ILI), other respiratory symptoms, or pneumonia by week



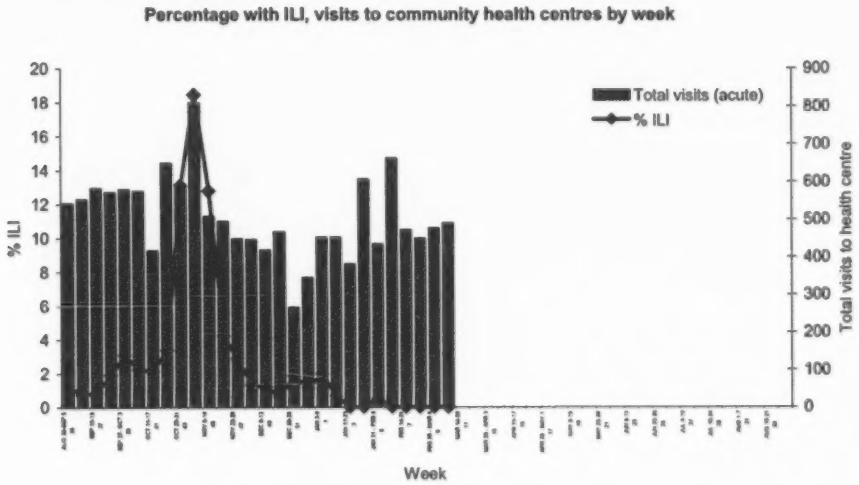
Influenza Assessment Clinic

This downtown Whitehorse clinic opened its doors on October 30th, 2009. The following graph depicts patient volume from October 30th to November 27, 2009. The clinic's last day of operation was November 27th, 2009.



Community Health Centres

Influenza-related visits to Community Health Centres (rural Yukon) increased substantially during weeks 42-44 while decreasing activity was seen from week 45 on. From week 48 on, the proportion of ILI related visits have returned to similar levels experienced in week 42 and earlier.
(Data collection on going).

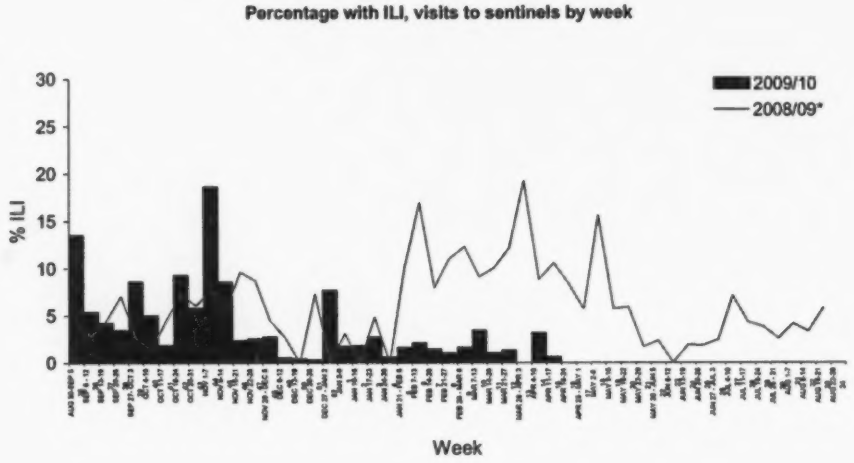


*Data provided from Community Nursing

Sentinel physicians/sites

The percentage of patients presenting to sentinel physicians or sites with ILI during weeks 13-18 was between 0.0% (weeks 13 and 16) and 3.1% (week 14).

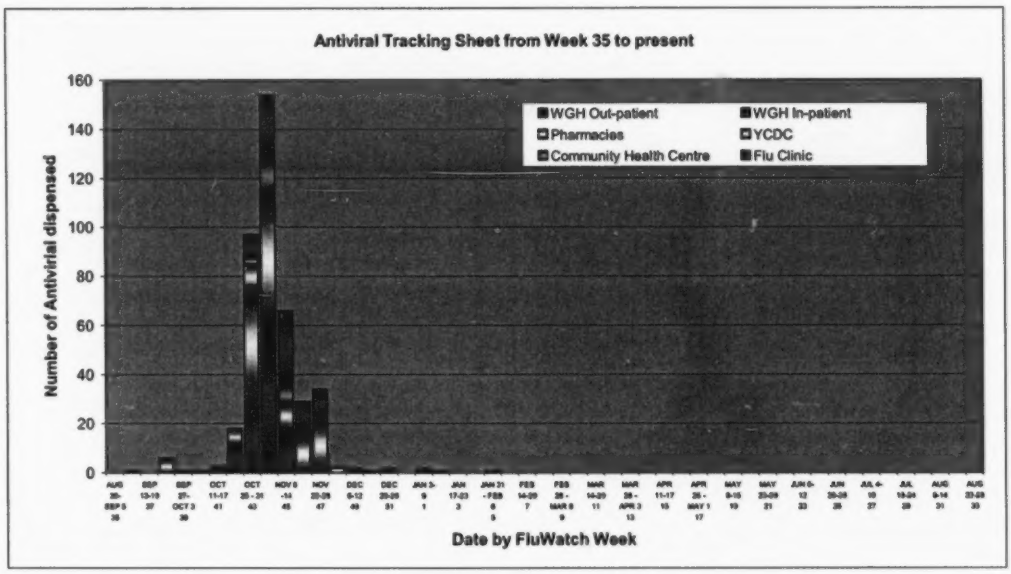
During the 2008/09 season, an average of five sentinel reports were received each week. A new recruitment of sentinel physicians and sites occurred in July 2009. There are presently 18 sentinel physicians/sites across the territory; during weeks 13-16 an average of 7(38%) sentinels reported. Yukon's sentinel surveillance system is comprised of all Community Health Centres and participating physicians. (FluWatch Sentinel Surveillance Information http://www.phac-aspc.gc.ca/fluwatch/sent-eng.php)



*2008/09 weeks are slightly different than those shown (following the Sun-Sat weekly pattern).

Antiviral Prescriptions/Dispensing

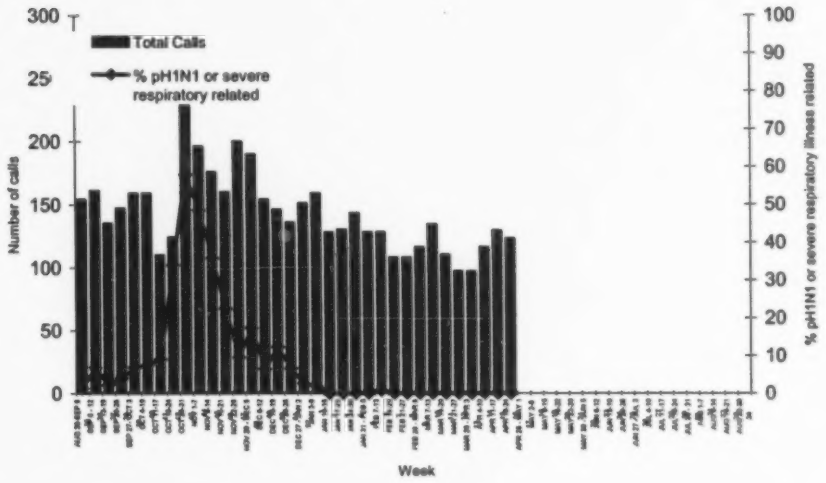
Antiviral prescriptions have decreased since week 45. During weeks 13-16 there were no distributions seen.



HealthLink 811

The percentage of calls related to Influenza A pH1N1 or severe respiratory illness have remained low during weeks 13-16.

Number of calls and percentage related to pH1N1 or severe respiratory illness by week



Calls related to pH1N1 or severe respiratory illness by type of call

Week ending	Jan 2	Jan 9	Jan 16	Jan 23	Jan 30	Feb 6	Feb 13	Feb 20	Feb 27	Mar 6	Mar 13	Mar 20	Mar 27	Apr 3	Apr 10
Week	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Triage	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Education	50.0	33.3	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wayfinding	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Triage = caller requesting information on symptom management/guidance; Education = caller requesting information about an illness or condition; Wayfinding = caller looking for contact or service directions

Outbreaks

No facility outbreaks have been reported since week 43 (Oct 25 - 31, 2009). On October 29th, 2009 (during week 43) YCDC was notified of an influenza outbreak within the Whitehorse Correctional facility. The outbreak was contained to fewer than 10 residents who developed symptoms during their stay at the facility or who exhibited symptoms of influenza upon admission. Causative organism of the outbreak was identified as pH1N1. This outbreak was declared over on November 16th, 2009

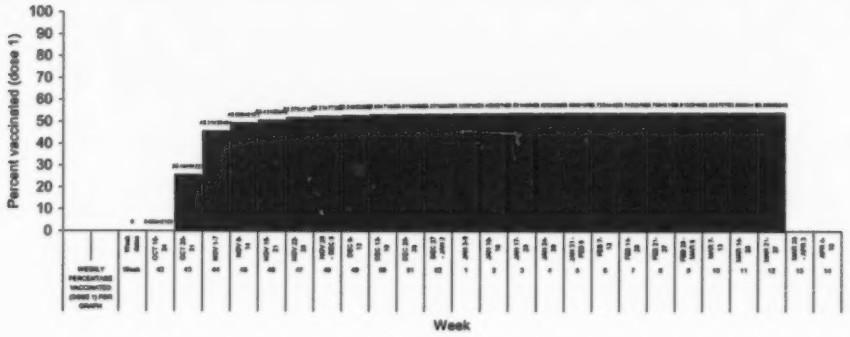
Schools

There have been no reports of high absenteeism in schools since week 45 (Nov 8 - 14, 2009).

Immunization

The percentage of the population vaccinated with one dose against influenza A pH1N1 reached 53.8% in week 8. The age groups with the highest proportions vaccinated (dose 1) are those 6 months to 4 years and those 65 year or older. Vaccine administration is ongoing, however, due to low volume of continued vaccine uptake, this section will no longer be updated on a monthly basis.

Proportion of population vaccinated, dose 1, by week in the Yukon Territory



Proportion of population vaccinated, dose 1, by age group by week 12 (March 27th 2010)

Age group	% Vaccinated
6 mo - 4 years	70.5
5-18 years	56.4
19-29 years	36.6
30-39 years	51.9
40-64 years	55.6
65+ years	68.9
TOTAL	53.9

***Data provided by the Community Nursing Vaccination Program.**

Adverse Events Following Immunization

Of 18 400, doses administered from October 26 to March 27, 2010, 33 adverse events following immunization have been reported. The types of reports include both local and allergic reactions. None of the events fit the criteria for serious adverse events, and none required hospitalization.

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN
2009-10: Number 26, Weeks 14-16
April 4-24, 2010

FluWatch

During week 15 (April 11-17), influenza activity in Canada remained low for the 17th consecutive week. The sentinel ILI rate was 9 per 1000 patient-visits, which is below the expected range for this time of year. Less than one percent of respiratory specimens tested nationally were positive for influenza, compared to 12% positivity for RSV. Nationally reported RSV positivity peaked in week 7 (28%). One influenza detection (pH1N1) was reported in week 15 (NS). www.phac-aspc.gc.ca/fluwatch/

National Microbiology Laboratory (NML): Antiviral Resistance

Drug susceptibility testing at the NML between September 1, 2009 and April 15, 2010 indicated that 99% (1065/1077) of pH1N1 isolates were sensitive to oseltamivir. All influenza B isolates (n=4) and influenza A/H3N2 isolates (n=13) tested were sensitive to oseltamivir, and the 6 seasonal A/H1N1 isolates tested were oseltamivir-resistant. All pH1N1 (n=1055), seasonal H1N1 (n=2), A/H3N2 (n=13), and influenza B (n=4) isolates were sensitive to zanamivir. All pH1N1 (n=1129) and A/H3N2 (n=24) isolates were resistant to amantadine. Four seasonal H1N1 isolates were sensitive to amantadine, and one was resistant. Global surveillance has shown that circulating pH1N1 viruses are resistant to amantadine but remain sensitive to zanamivir and oseltamivir, although sporadic cases of oseltamivir resistance have been observed worldwide.

International

During week 15 (April 11-17), influenza activity remained low in the United States. Two percent (37/1749) of respiratory specimens tested in reference laboratories were positive for influenza, and all (20/20) subtyped influenza A viruses were pH1N1. Two influenza B viruses were detected. The proportion of sentinel physician visits due to ILI remained low (1.1%) and below the national baseline. *www.cdc.gov/flu/weekly/*

In Europe, all countries reported low-level influenza activity for the week of April 12-18. Nine percent of sentinel laboratory samples were positive for influenza, consistent with the decrease observed in previous weeks. Of 15 sentinel influenza detections across Europe from April 12-18, 9 were influenza B, and 6 were influenza A (subtype information not available). *www.eiss.org*

Globally, pH1N1 activity remains low in the temperate zone of the northern hemisphere. Influenza B activity has continued to spread over a broader geographic area in recent weeks, and influenza B is now the predominant circulating virus across East Asia, Central Africa, and Northern and Eastern Europe. Of the influenza B viruses which were further characterized in recent weeks, the majority belonged to the Victoria lineage (i.e., matching lineage of 2009-10 vaccine influenza B component). In the southern hemisphere, Chile has reported regional increases in ILI activity for the past few weeks, with sentinel detections of RSV (53% of viruses detected), adenovirus (24%), and pH1N1 influenza (12%). In Australia and New Zealand, influenza activity remains low, with only sporadic detections of pH1N1 to date in 2010.
www.who.int/csr/don/2010_04_23a/en/index.html
WHO Recommendations for 2010-11 Northern Hemisphere Influenza Vaccine
On February 18, the WHO announced the recommended strain components for the 2010-11 Northern Hemisphere trivalent influenza vaccine:
A/California/7/2009 (H1N1)-like virus
A/Perth/16/2009 (H3N2)-like virus
B/Brisbane/60/2008 (Victoria lineage)-like virus
A/California/7/2009 (H1N1) is the recommended component for pandemic H1N1 vaccines produced and administered in 2009-10. The recommended H3N2 virus has changed from the previous year's vaccine (A/Brisbane/10/2007), while the recommended B virus remains unchanged (B/Brisbane/60/2008). For further details, see:
www.who.int/csr/disease/influenza/recommendations2010_11north/en/index.html

Pandemic H1N1 Influenza Web Sites

Yukon H&SS	www.hss.gov.yk.ca/
PHAC:	www.phac-aspc.gc.ca/alert-alerte/swine_200904-eng.php
BCCDC:	www.bccdc.ca/dis-cond/a-z/_h/HumanSwineFlu/default.htm www.health.gov.bc.ca/pandemic/response/index.html
US CDC:	www.cdc.gov/swineflu/index.htm
WHO:	www.who.int/csr/disease/swineflu/en/index.html

Acronyms

ILI:	Influenza-Like Illness
pH1N1:	Pandemic H1N1 influenza or swine origin influenza
WHO:	World Health Organization

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